

32. (Twice Amended) A system for automatically identifying an object in a series of video frames and associating an event with said object, the system comprising:
 a system for determining a location in one video frame, wherein an action by a pointing device has occurred defining a selected location;
 a system for determining a color value for said selected location in said one frame; and
 a system for automatically associating an event with said object in said one video frame and succeeding frames.

In the Title:

Please amend the title as follows:

Interactive Method and Apparatus for Automatically Identifying an Object in a Series of Video Frames and Associating the Object with an Event.

Remarks

Upon entry of the instant amendment, claims 31 and 32 are pending. These claims have been amended to define patentable subject matter over the references of record. In addition, the title of the invention has been amended to more clearly identify the invention to which the claims are directed. It is respectfully submitted that the application, as amended, is in condition for allowance.

Objections to the Specification:

The title of the application was found not descriptive. The applicants respectfully submit that the proposed title is more descriptive than the title described in paragraph 1 of the Detailed Action. As such, the Examiner is respectfully requested to reconsider and withdraw this objection.

Claim Rejections - 35 U.S.C. §103

Claims 31 and 32 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Lindhorst et al.* U.S. Patent No. 6,337,696 in view of *Isadore-Barreca et al.* U.S. Patent No. 6,205,231. It is respectfully submitted that neither *Lindhorst et al.* or *Isadore-Barreca et al.* disclose or suggest a method and system for automatically identifying an object in a series of video frames and associating an event with that object. Rather, it is respectfully submitted that the system recited in the claims at issue is in fact an improvement over the system disclosed in the *Isadore-Barreca et al.* patent. In particular, the system recited in the claims at issue is relatively simple and is less computation intensive and requires much less memory space than

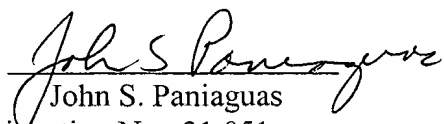
the system disclosed in the *Isadore-Barreca et al.* patent. In particular, the system in accordance with the present invention relates to a system and method for automatically identifying a selected object in a series of video frames and associating an event with the selected object. More particularly, the system ascertains when a pointing device has selected an object in a single frame of a series of video frames. The system ascertains the color value of the selected object. The events are then linked with the color value, for example, as illustrated in Table 1 on pages 20 and 21 of the instant application. Unlike the system disclosed in the *Isadore-Barreca et al.* patent, the system in accordance with the present invention is unconcerned with the physical location of the object within the video frame. As such, computation time is greatly reduced as well as the memory requirements.

The system disclosed in the *Isadore-Barreca et al.* patent utilizes "tags". These tags relate to the position of the object within the video frame. By tagging the video objects, the system disclosed in the *Isadore-Barreca et al.* patent is extremely computational intensive and requires a relatively large memory to keep track of the object in successive video frames. For example, standard NTSC video is 60 frames per second. Thus, one hour of video would consist of 216,000 frames. For each of those frames, the *Isadore-Barreca* system teaches storing one or more tags based on the physical location of the selected video object within the frame. As the Examiner can readily appreciate, a significant amount of memory would be required to keep track of the object, for example, for one hour of video.

The invention, on the other hand, requires a significantly smaller amount of memory and is less computation extensive since the system merely associates events with color values. Although edge detection may be used to automatically determine the color in succeeding video frames, the edge detection algorithm is simply used to determine a color value. Once the color value is determined, it is automatically linked to an event based upon its color value and not its position. Accordingly, for all of the above reasons, the Examiner is respectfully requested to reconsider and withdraw the rejections.

Respectfully submitted,

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Attachment for Claim Amendments
Version to Show Markings to Show Changes Made

31. (Twice Amended) A method for [associating a color of] automatically identifying an object in a plurality of video frames and associating the object with an event comprising:

determining a location on [a video screen] one of said video frames where an action by a pointing device has occurred[,] defining a selected location;

determining a color value for said selected location; and

automatically associating an event with said color value in said one video frame and succeeding frames [including the step of defining an edge] associated with the color value.

32. (Twice Amended) A system for automatically [associating a color of] identifying an object in a series of video frames and associating [with] an event with said object, the system comprising:

a system for determining a location [on a] in one video [screen] frame, wherein an action by a pointing device has occurred[,] defining a selected location;

a system for determining a color value for said selected location in said one frame; and

a system for automatically associating an event with said object in said one video frame and succeeding frames [color value, wherein said system is configured to define an edge associated with the color value].